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Pharmacokinetic insights in individual drug response

Koomen, Jeroen

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Pharmacokinetic insights in individual drug response

A model-based approach to quantify individual exposure-response relationships in type 2 diabetes

Jeroen Vincent Koomen

Colophon

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Pharmacokinetic insights in individual drug response

A model-based approach to quantify individual
 exposure-response relationships in type 2 diabetes

PhD thesis

to obtain the degree of PhD at the
 University of Groningen
 on the authority of the
 Rector Magnificus Prof. C. Wijmenga
 and in accordance with
 the decision by the College of Deans.

This thesis will be defended in public on

Monday 18 January 2021 at 16.15 hours

by

Jeroen Vincent Koomen

born on 17 oktober 1991
 in Utrecht

Supervisor

Prof. H.J. Lambers Heerspink
Prof. P.G.M. Mol

Co-supervisors

Dr. J. Stevens

Assessment Committee

Prof. A. de Boer
Prof. T. van Gelder
Prof. M.M.R.F. Struys

Paranymphs

Dr. M.Y.A.M. Kroonen
E. de Vries, MSc

```

#####
rm(list = ls(all=T))
"%>%"<-magrittr::"%>%"
require(tidyverse)
#####

First<-
paste("D D D"
"G D5" #####
"CS B A G5 D5", #####
"CS B A G5 D5", #####
"CS B CS A D D D", #####27
"G D5", "CS B A G5 D5", #####31
"CS B A G5 D5", "CS B CS A D D D",#
"E E CS B A G", "G A B A E F# D D", #####40
#####40 #####
"E E CS B A G", "D5 A D D", "E E CS B A G"#
#####
"G A B A E F# D5 D5", #####39 #####
"G5 F5 D#5 D5 CS A# A G", "D5 D D D", #
"G D5", "CS B A G5 D5", #####36
"CS B A G5 D5", "CS B CS A D D D", "G D5", "CS B A G5 D5", #####50
"G5 F5 D#5 Bb5 A5", "G5 G G G G";Second<-c(0.33,0.33,0.33, 2,2,0.33,0.33,0.33,2,1,0.33,0.33,0.33,2,
1,0.33,0.33,0.33,2,0.33,0.33,0.33,2,2,0.33,0.33,0.33,0.33,2,1,0.33,0.33,2,1,0.33,0.33,0.33,2,0.75,0.25,1.5,
0.5,0.5,0.5,0.5,0.5,0.33,0.33,0.33,0.75,0.25,1., 0.75,0.25,1.5 ,0.5,0.5,0.5,0.5,0.5,1.2,0.75,0.25,1.5,0.5,0.5,
0.5,0.5,0.33,0.33,0.33,0.75,
0.33,0.33,2,2,0.33,0.33,
0.33, 2,1,0.33,0.33 ,0.33,2,1,0.33,0.33,0.33,2,0.33,0.33,0.33,0.33,####
2,2, 0.33,0.33,0.33, 2,1,0.33,0.33,0.33,2,1,1,0.33,0.33,0.33,0.33,1)###
read <-c(A=0,B=2,C=3, D=5,E=7,F=8,G=10)#####
PhD <-data.frame(First= stringr::str_split(First," ")[[1]],
Sec =Second);PhD<-PhD%>% mutate(Third=substring(First,
nchar( First)%>% (suppressWarnings( as.numeric.))) %>%
ifelse( is.na(, 4, ),Fourth =
read[ substr(First,1,1)],Fourth =
Fourth+ grepl("#",First)-grepl("b",
First) +Third*12+12*(Fourth<3),Fifth=
2^( (Fourth-60)/12)*440),#####
bel<- function(Fifth,Sec){Sixth<-sin(
seq( 0,Sec/150*60,1/44100)*
Fifth* 2*pi);Sev<-seq(0,
1.50 /44100)
Sixth*
c(Sev,rep(1,
length(Sixth)-2*
length(Sev)),rev(Sev))}
PhD<-mapply(bel, PhD$Fifth, PhD$Sec)%>%
do.call("c", );stringr::str_c(stringr::str_c(
letters[c(exp(0),21,sqrt(16),3^2,15)],collapse=""),",",",",
stringr::str_c(letters[c(2^4,4*3,28^0,factorial(4)+1)],collapse=""),
"(PhD)"))%>%parse(text=,)%>%eval()

```


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